

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application.

Claim 1 (previously presented): For semiconductor manufacturing equipment, a ceramic susceptor comprising:

- a ceramic substrate joined to a substantially pipe-shaped shaft;
- a resistive heating element formed either superficially or interiorly in said ceramic substrate; and
- a concavity molded in a wafer-carrying face defined on a surface of said ceramic substrate through which said resistive heating element issues heat when the susceptor performs a heating operation, said concavity being 0.001 to 0.7 mm per 300 mm length along the wafer-carrying face in negative arched contour when the susceptor is not heating; wherein

the pipe-shaped shaft is disposed to warp the substrate in a controlled manner such that said concavity of the wafer-carrying face decreases upon heating of the substrate.

Claim 2 (original): A ceramic susceptor as set forth in claim 1, wherein the ceramic substrate is made of at least one ceramic selected from aluminum nitride, silicon nitride, aluminum oxynitride, and silicon carbide.

Claim 3 (original): A ceramic susceptor as set forth in claim 1, wherein the resistive heating element is made from at least one metal selected from tungsten, molybdenum, platinum, palladium, silver, nickel, and chrome.

Claim 4 (original): A ceramic susceptor as set forth in claim 1, further comprising a plasma electrode disposed either in the surface or in the interior of said ceramic substrate.

Claim 5 (original): A ceramic susceptor as set forth in claim 2, wherein the resistive heating element is made from at least one metal selected from tungsten, molybdenum, platinum, palladium, silver, nickel, and chrome.

Claim 6 (original): A ceramic susceptor as set forth in claim 2, further comprising a plasma electrode disposed either in the surface or in the interior of said ceramic substrate.

Claim 7 (original): A ceramic susceptor as set forth in claim 3, further comprising a plasma electrode disposed either in the surface or in the interior of said ceramic substrate.

Claim 8 (original): A ceramic susceptor as set forth in claim 5, further comprising a plasma electrode disposed either in the surface or in the interior of said ceramic substrate.

Claim 9 (previously presented): A ceramic susceptor for semiconductor manufacturing equipment, the susceptor comprising:

a ceramic substrate joined to a substantially pipe-shaped shaft and defining a wafer-carrying face;

a resistive heating element formed either superficially or interiorly in said ceramic substrate so as to issue heat through the wafer-carrying face when the susceptor is operated; and

an at-rest concavity configured in the wafer-carrying face of said ceramic substrate; wherein

the susceptor is formed so that the wafer-carrying face has a curvature of -0.001 to 0.7 mm per 300 mm length when the susceptor is at rest, and so that when operated to heat said substrate to 500°C , the susceptor flexes such that the wafer-carrying face assumes a curvature of from -0.2 mm to $+0.45$ mm per 300 mm length.

Claim 10 (previously presented): The ceramic susceptor of claim 9 having an isothermal rating of less than 0.5 % at 500°C .